

KENTUCKY BOARD OF NURSING  
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**ADVISORY OPINION STATEMENT**

**ROLES OF NURSES IN THE ADMINISTRATION OF MEDICATION PER  
INTRASPINAL ROUTES**

**Introduction**

The Kentucky Board of Nursing is authorized by Kentucky Revised Statutes (KRS) Chapter 314 to regulate nurses, nursing education and practice, and to issue advisory opinions on nursing practice, in order to assure that safe and effective nursing care is provided by nurses to the citizens of the Commonwealth.

The Kentucky Board of Nursing issues advisory opinions as to what constitutes safe nursing practice. As such, an opinion is not a regulation of the Board and does not have the force and effect of law. It is issued as a guidepost to licensees who wish to engage in safe nursing practice.

**Accountability and Responsibility of Nurses**

KRS 314.021(2) holds nurses individually responsible and accountable for rendering safe, effective nursing care to clients and for judgments exercised and actions taken in the course of providing care.

KRS 314.021(2) imposes individual responsibility upon nurses. Acts which are within the permissible scope of practice for a given licensure level may be performed only by those licensees who personally possess the education and skill proficiency to perform those acts in a safe, effective manner.

Nursing practice should be consistent with the *Kentucky Nursing Laws*, established standards of practice, and be evidence based.

**Statutory Definitions and Policy**

KRS 314.011(6) defines "registered nursing practice" as:

... The performance of acts requiring substantial specialized knowledge, judgment, and nursing skill based upon the principles of psychological, biological, physical, and social sciences in the application of the nursing process in:

- a) The care, counsel, and health teaching of the ill, injured or infirm.
- b) The maintenance of health or prevention of illness of others.
- c) The administration of medication and treatment as prescribed by physician, physician assistant, dentist, or advanced registered nurse practitioner and as further authorized or limited by the board, and which are consistent either with American Nurses' Association Standards of Practice or with Standards of

Practice established by nationally accepted organizations of registered nurses. Components of medication administration include, but are not limited to:

1. Preparing and giving medication in the prescribed dosage, route, and frequency, including dispensing medications only as defined in subsection (17)(b) of this section;
  2. Observing, recording, and reporting desired effects, untoward reactions, and side effects of drug therapy;
  3. Intervening when emergency care is required as a result of drug therapy;
  4. Recognizing accepted prescribing limits and reporting deviations to the prescribing individual;
  5. Recognizing drug incompatibilities and reporting interactions or potential interactions to the prescribing individual; and
  6. Instructing an individual regarding medications.
- d) The supervision, teaching of, and delegation to other personnel in the performance of activities relating to nursing care.
- e) The performance of other nursing acts which are authorized or limited by the board, and which are consistent either with American Nurses' Association Standards of Practice or with Standards of Practice established by nationally accepted organizations of registered nurses.

KRS 314.011(8) defines "advanced registered nursing practice" as:

... The performance of additional acts by registered nurses who have gained added knowledge and skills through an organized post basic program of study and clinical experience and who are certified by the American Nurses' Association or other nationally established organizations or agencies recognized by the board to certify registered nurses for advanced nursing practice. The additional acts shall, subject to approval of the board, include, but not be limited to, prescribing treatment, drugs, devices, and ordering diagnostic tests. Advanced registered nurse practitioners who engage in these additional acts shall be authorized to issue prescriptions for and dispense nonscheduled legend drugs as defined in KRS 217.905, under the conditions set forth in KRS 314.042. Nothing in this chapter shall be construed as requiring an advanced registered nurse practitioner designated by the board as a nurse anesthetist to obtain prescriptive authority pursuant to this chapter or any other provision of law in order to deliver anesthesia care. The performance of these additional acts shall be consistent with the certifying organization or agencies' scopes and standards of practice recognized by the board by administrative regulation.

### **Advisory Opinion**

After study of the issues and concerns regarding the role of registered nurses in the administration of medication per intraspinal routes for the purpose of analgesia and/or anesthesia, the Kentucky Board of Nursing issued the following advisory opinions:

### **Analgesia Via Intraspinal (Epidural/Intrathecal) Routes**

The administration of medication<sup>1</sup> for analgesia per intraspinal routes<sup>2</sup>, as prescribed by a documented order of a qualified provider, is within the scope of registered nursing practice and not within the scope of licensed practical nursing practice.

<sup>1</sup>

The administration of medications for analgesic purposes may include such medications as morphine sulfate (duramorph) bupivacaine (marcaine spinal); and sub-anesthesia dosages of Ketamine Hydrochloride; however, the administration of such medications via intraspinal route for the intrapartum patient in labor is within the scope of practice of the advanced registered nurse practitioner, designated nurse anesthetist. The Association of Women's Health, Obstetric and Neonatal Nurses has issued a position statement entitled "The Role of the RN in the Care of Pregnant Women Receiving Analgesia/Anesthesia by Catheter Techniques (Epidural, Intrathecal, Spinal, PCEA Catheters) (2001)

<sup>2</sup>

Intraspinal routes - The administration of medication into the epidural or intrathecal space of the spinal cord via an intraspinal delivery system. An intraspinal delivery system may include a) a percutaneous epidural or intrathecal catheter, b) an implanted injection port or reservoir, or c) an implanted infusion pump.

Registered nurses who administer medication via intraspinal routes:

- 1) are responsible for having substantial specialized knowledge and skill in the administration of medication per these routes;
- 2) should have documented evidence of completion of continuing education which provides for clinical practice and demonstrated competency in the performance of the procedures;
- 3) are responsible for documentation of educational preparation and for maintaining competency in the performance of the procedures; and
- 4) should perform the procedure(s), according to approved written policies/procedures of the employing agency that are consistent with the legal definition of nursing practice, and include but are not limited to the following:
  - indications for use
  - patient selection criteria
  - mode of infusion
  - patient assessment and plan of care
  - management of side effects and potential complications
  - care of catheter
  - nursing implications

### **Anesthesia Via Spinal, Epidural or Caudal Routes**

The responsibilities both for the administration of medication for the purpose of anesthesia per spinal, epidural or caudal routes, and for the monitoring of the patient's reaction to such medication are within the scope of practice of the advanced registered nurse practitioner, designated nurse anesthetist; such acts are not within the scope of registered nursing practice as defined in KRS 314.011(6). Therefore, specific procedures involved in the administration of anesthetic agents via these routes are not appropriate functions for registered nurses, and include but are not limited to the following:

- 1) Injection of medications for the purpose of anesthesia via intraspinal catheter;
- 2) Changing of syringes on an intraspinal catheter;
- 3) Adjustment of anesthetic infusion rates per volume control or rate regulators when the physician/anesthesiologist/ARNP is not present to monitor the patient's response.

### **Insertion, Repositioning and Removal of an Epidural, Intrathecal, or Caudal Catheter by Registered Nurses**

The insertion, advancement or repositioning of a percutaneous epidural, intrathecal, or caudal catheter is not within the scope of registered nursing practice, but is within the scope of practice of the advanced registered nurse practitioner, designated nurse anesthetist.

Registered nurses, who have documented evidence of educational preparation and clinical competence in the performance of the procedure, may remove an epidural, intrathecal, or caudal catheter, inserted for the purpose of anesthesia or analgesia, based upon:

- 1) documentation of uncomplicated catheter insertion;

- 2) documentation that no catheter related complications<sup>3</sup> have occurred since the insertion of the catheter;
- 3) a direct order of the physician/provider who is responsible for the patient; and
- 4) an approved written facility/nursing policy and procedure.

### **Determining Scope of Practice**

KRS 314.021(2) holds all nurses individually responsible and accountable for the individual's acts based upon the nurse's education and experience. Each nurse must exercise professional and prudent judgment in determining whether the performance of a given act is within the scope of practice for which the nurse is both licensed and clinically competent to perform. In addition to this advisory opinion statement, the Kentucky Board of Nursing has published "Scope of Practice Determination Guidelines" which contains a decision tree chart providing guidance to nurses in determining whether a selected act is within an individual nurse's scope of practice now or in the future. A copy of the guidelines may be purchased from the Board office or downloaded from the KBN website at <http://kbn.ky.gov>.

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Catheter related complications may include but are not limited to: a) kinking, knotting, shearing, compression or leakage of the catheter, b) unilateral anesthesia, c) extrusion of the catheter out of the epidural/intrathecal space, d) unpredictability of the direction of the catheter, e) fibrosis, or f) infection.

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